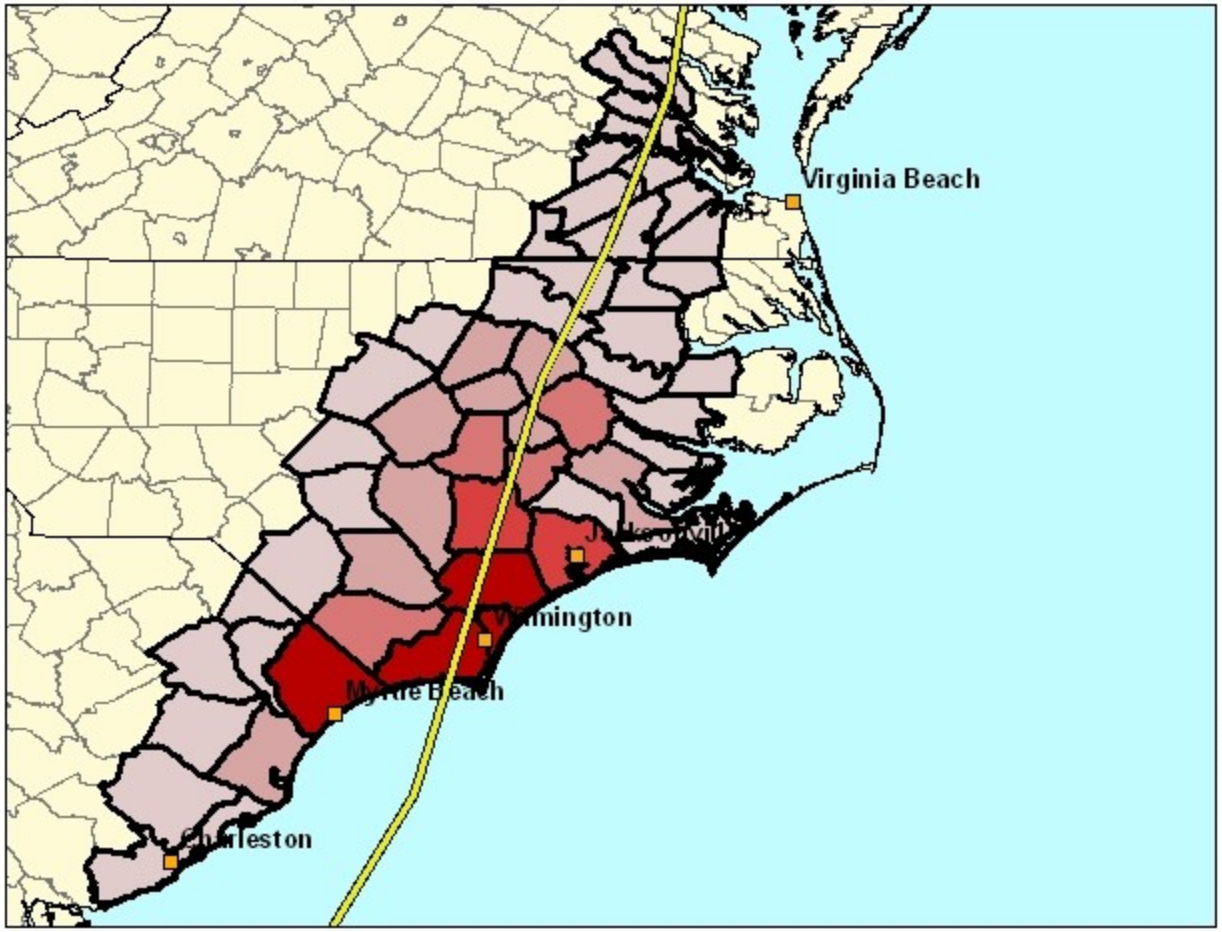
US Army Corps of Engineers

# Hurricane Ernesto 2006 Debris Model

## Landfall Plus About 12 Hours

**For Official Use Only!**




### *Post Landfall Debris Model Results*

North Carolina - 11,432,000 Yards
South Carolina - 1,206,000 Yards
Virginia - 158,000 Yards

*Model results per County on following page*

This model is based on a Category 3 storm making landfall near Holden Beach, NC.

Historic Track

**Debris**

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 3 storm making landfall near Holden Beach, NC. These projections are based on information from the NHC (1100 EDT 09/16/2007) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Ernesto 2006 Debris Model | |
|---|---|
| **Generated By:** Siemsen, LRL 1130 EDT 09/16/2007 | |
| **Sources:** HURREVAC LRL-DEBRIS |  |

US Army Corps of Engineers

# Hurricane Ernesto 2006 Debris Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | Yards per State | County | Yards per County |
|---|---|---|---|
| North Carolina | | Beaufort | 70,000 |
| | | Bertie | 26,000 |
| | | Bladen | 134,000 |
| | | Brunswick | 1,875,000 |
| | | Carteret | 97,000 |
| | | Columbus | 270,000 |
| | | Craven | 195,000 |
| | | Cumberland | 40,000 |
| | | Duplin | 698,000 |
| | | Edgecombe | 128,000 |
| | | Franklin | < 1,000 |
| | | Gates | 3,000 |
| | | Greene | 122,000 |
| | | Halifax | 69,000 |
| | | Harnett | 24,000 |
| | | Hertford | 31,000 |
| | | Johnston | 138,000 |
| | | Jones | 56,000 |
| | | Lenoir | 436,000 |
| | | Martin | 40,000 |
| | | Nash | 113,000 |
| | | New Hanover | 3,960,000 |
| | | Northampton | 26,000 |
| | | Onslow | 655,000 |
| | | Pamlico | 16,000 |
| | | Pender | 1,018,000 |
| | | Pitt | 374,000 |
| | | Robeson | 63,000 |
| | | Sampson | 222,000 |
| | | Wake | < 1,000 |
| | | Washington | < 1,000 |

| State | Yards per State | County | Yards per County |
|---|---|---|---|
| North Carolina | | Wayne | 368,000 |
| (continued) | | Wilson | 165,000 |
| North Carolina | 11,432,000 | | |
| | | | |
| South Carolina | | Berkeley | 2,000 |
| | | Charleston | 5,000 |
| | | Dillon | 2,000 |
| | | Florence | 3,000 |
| | | Georgetown | 112,000 |
| | | Horry | 1,058,000 |
| | | Marion | 14,000 |
| | | Williamsburg | 10,000 |
| South Carolina | 1,206,000 | | |
| | | | |
| Virginia | | Charles City | 3,000 |
| | | Franklin City | 12,000 |
| | | Greensville | 3,000 |
| | | Isle Of Wight | 4,000 |
| | | James City | 59,000 |
| | | King And Queen | < 1,000 |
| | | King William | 5,000 |
| | | New Kent | 7,000 |
| | | Prince George | 4,000 |
| | | Southampton | 26,000 |
| | | Suffolk City | 2,000 |
| | | Surry | 11,000 |
| | | Sussex | 13,000 |
| | | Williamsburg | 6,000 |
| | | York | 3,000 |

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Ernesto 2006 Debris Model**

**Generated By:**
Siemsen, LRL 1130 EDT 09/16/2007

**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Ernesto 2006 Debris Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | Yards per State | County | Yards per County |
|---|---|---|---|
| Virginia | 158,000 | | |
| (continued) | | | |

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
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**Generated By:**
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**Sources:**
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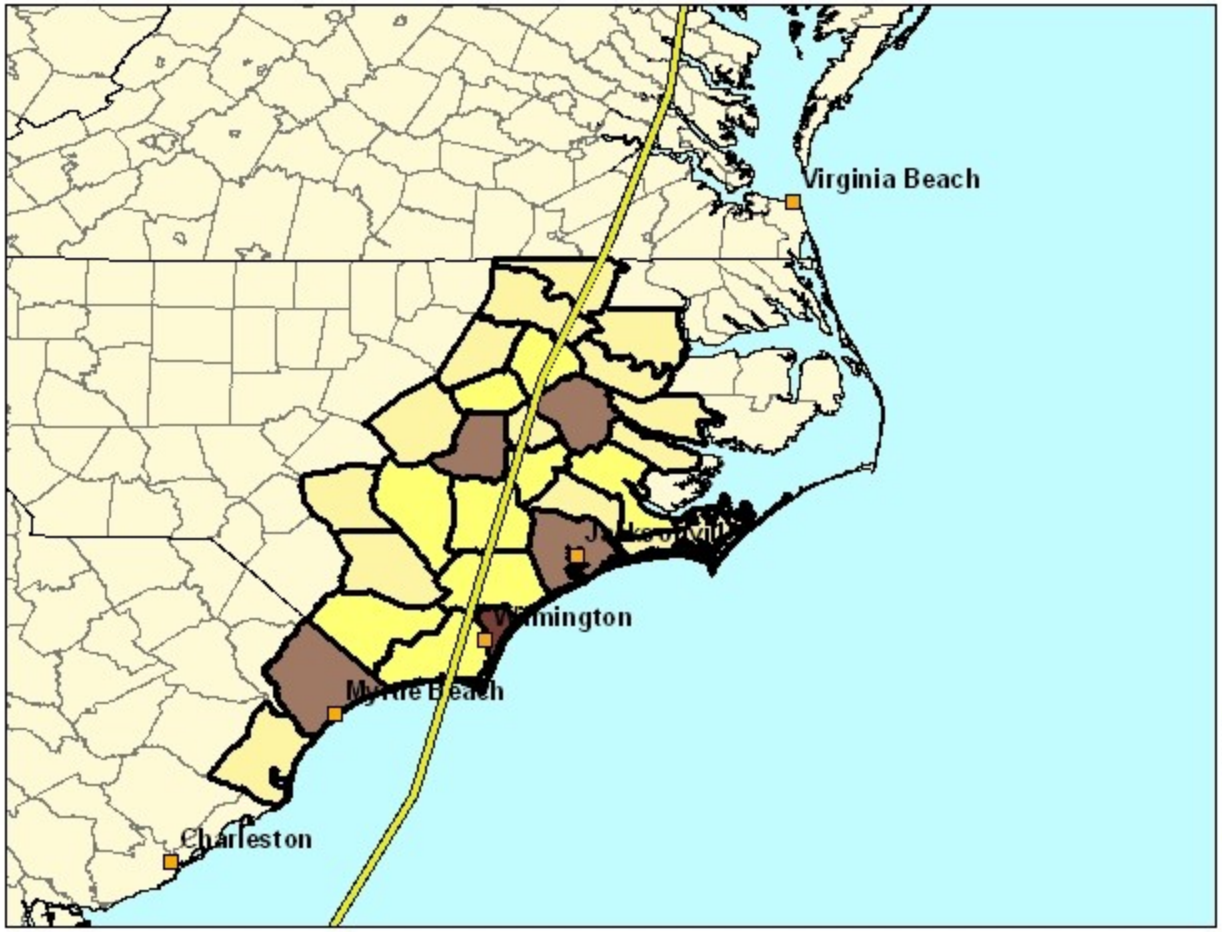
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Ernesto 2006 Population Model

## Landfall Plus About 12 Hours

**For Official Use Only!**




### *Post Landfall Population Model Results*

North Carolina - 1,193,000
South Carolina - 182,000

*Model results per County on following page*

This model is based on a Category 3 storm making landfall near Holden Beach, NC.

Historic Track

**Population**

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 3 storm making landfall near Holden Beach, NC. These projections are based on information from the NHC (1100 EDT 09/16/2007) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2006 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Ernesto 2006 Population Model | |
|---|---|
| **Generated By:** Siemsen, LRL 1130 EDT 09/16/2007 | |
| **Sources:** HURREVAC LRL-DEBRIS |  |

US Army Corps of Engineers

# Hurricane Ernesto 2006 Population Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | Population per State | County | Population per County |
|---|---|---|---|
| North Carolina | | Beaufort | 4,000 |
| | | Bertie | < 1,000 |
| | | Bladen | 21,000 |
| | | Brunswick | 95,000 |
| | | Carteret | 9,000 |
| | | Columbus | 45,000 |
| | | Craven | 47,000 |
| | | Cumberland | < 1,000 |
| | | Duplin | 53,000 |
| | | Edgecombe | 52,000 |
| | | Greene | 21,000 |
| | | Halifax | 7,000 |
| | | Johnston | 8,000 |
| | | Jones | 11,000 |
| | | Lenoir | 58,000 |
| | | Martin | 7,000 |
| | | Nash | 4,000 |
| | | New Hanover | 183,000 |
| | | Northampton | < 1,000 |
| | | Onslow | 151,000 |
| | | Pender | 49,000 |
| | | Pitt | 146,000 |
| | | Sampson | 46,000 |
| | | Wayne | 114,000 |
| | | Wilson | 62,000 |
| North Carolina | 1,193,000 | | |
| | | | |
| South Carolina | | Georgetown | 10,000 |
| | | Horry | 172,000 |
| South Carolina | 182,000 | | |
| | | | |

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2006 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Ernesto 2006 Population Model**

**Generated By:**
Siemsen, LRL 1130 EDT 09/16/2007

**Sources:**
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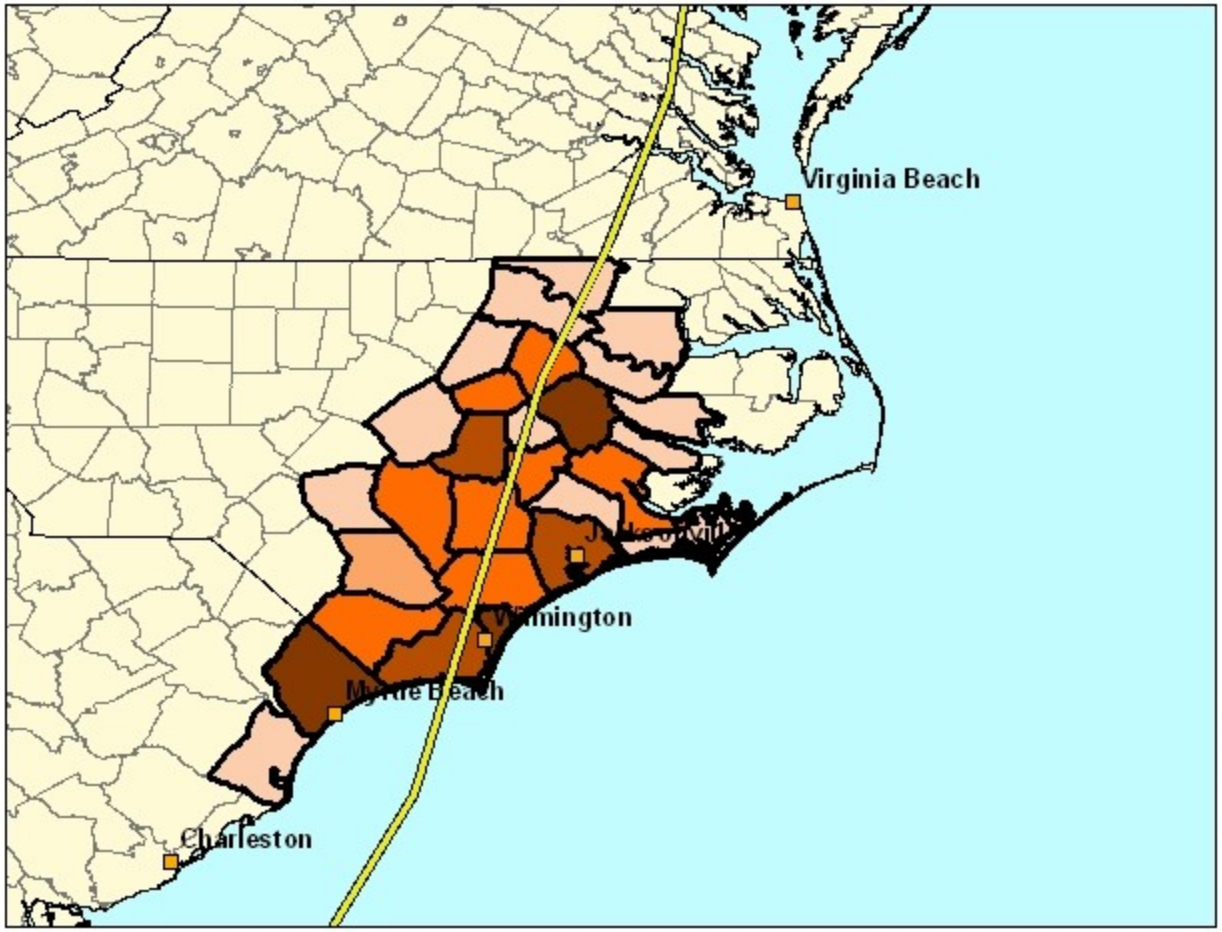
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Ernesto 2006 Households Model

## Landfall Plus About 12 Hours

**For Official Use Only!**




### *Post Landfall Households Model Results*

North Carolina - 467,000
South Carolina - 79,000

*Model results per County on following page*

This model is based on a Category 3 storm making landfall near Holden Beach, NC.

Historic Track

**Households**

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 3 storm making landfall near Holden Beach, NC. These projections are based on information from the NHC (1100 EDT 09/16/2007) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2006 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Ernesto 2006 Households Model | |
|---|---|
| **Generated By:** Siemsen, LRL 1130 EDT 09/16/2007 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 6 of 13 |

US Army Corps of Engineers

# Hurricane Ernesto 2006 Households Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | Households per State | County | Households per County |
|---|---|---|---|
| North Carolina | | Beaufort | 2,000 |
| | | Bertie | < 1,000 |
| | | Bladen | 9,000 |
| | | Brunswick | 40,000 |
| | | Carteret | 4,000 |
| | | Columbus | 18,000 |
| | | Craven | 19,000 |
| | | Cumberland | < 1,000 |
| | | Duplin | 20,000 |
| | | Edgecombe | 19,000 |
| | | Greene | 8,000 |
| | | Halifax | 3,000 |
| | | Johnston | 3,000 |
| | | Jones | 4,000 |
| | | Lenoir | 24,000 |
| | | Martin | 3,000 |
| | | Nash | 2,000 |
| | | New Hanover | 78,000 |
| | | Northampton | < 1,000 |
| | | Onslow | 49,000 |
| | | Pender | 20,000 |
| | | Pitt | 58,000 |
| | | Sampson | 17,000 |
| | | Wayne | 43,000 |
| | | Wilson | 24,000 |
| North Carolina | 467,000 | | |
| | | | |
| South Carolina | | Georgetown | 5,000 |
| | | Horry | 74,000 |
| South Carolina | 79,000 | | |
| | | | |

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2006 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Ernesto 2006 Households Model**

**Generated By:**
Siemsen, LRL 1130 EDT 09/16/2007

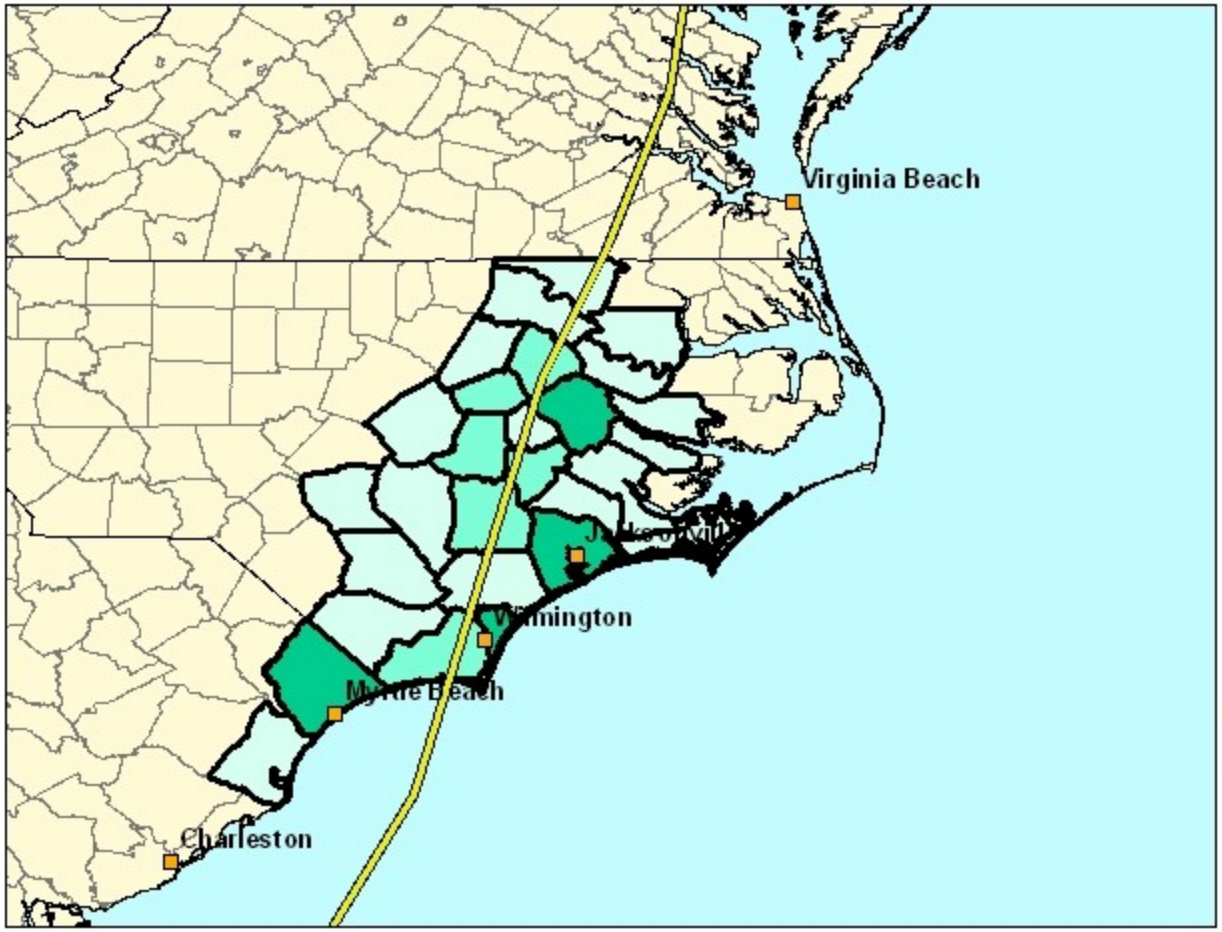
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Ernesto 2006 Commodities Model

## Landfall Plus About 12 Hours

**For Official Use Only!**




***Post Landfall Ice/Water Model Results***

**Day One / Day Two / Day Three**
NC – 27/54/108 Truckloads
SC – 4/8/15 Truckloads

*Model results per County on following page*

This model is based on a Category 3 storm making landfall near Holden Beach, NC.

Historic Track

**Commodities**

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 3 storm making landfall near Holden Beach, NC. These projections are based on information from the NHC ***(1100 EDT 09/16/2007)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Ernesto 2006 Commodities Model | |
|---|---|
| **Generated By:** Siemsen, LRL 1130 EDT 09/16/2007 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 8 of 13 |

US Army Corps of Engineers

# Hurricane Ernesto 2006 Commodities Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | Truckloads per State | County | Truckloads per County |
|---|---|---|---|
| North Carolina | | Beaufort | 1 |
| | | Bertie | 1 |
| | | Bladen | 2 |
| | | Brunswick | 8 |
| | | Carteret | 1 |
| | | Columbus | 4 |
| | | Craven | 4 |
| | | Cumberland | 1 |
| | | Duplin | 5 |
| | | Edgecombe | 5 |
| | | Greene | 2 |
| | | Halifax | 1 |
| | | Johnston | 1 |
| | | Jones | 1 |
| | | Lenoir | 5 |
| | | Martin | 1 |
| | | Nash | 1 |
| | | New Hanover | 15 |
| | | Northampton | 1 |
| | | Onslow | 13 |
| | | Pender | 4 |
| | | Pitt | 12 |
| | | Sampson | 4 |
| | | Wayne | 10 |
| | | Wilson | 5 |
| North Carolina | 108 | | |
| | | | |
| South Carolina | | Georgetown | 1 |
| | | Horry | 14 |
| South Carolina | 15 | | |
| | | | |

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Ernesto 2006 Commodities Model**

**Generated By:**
Siemsen, LRL 1130 EDT 09/16/2007

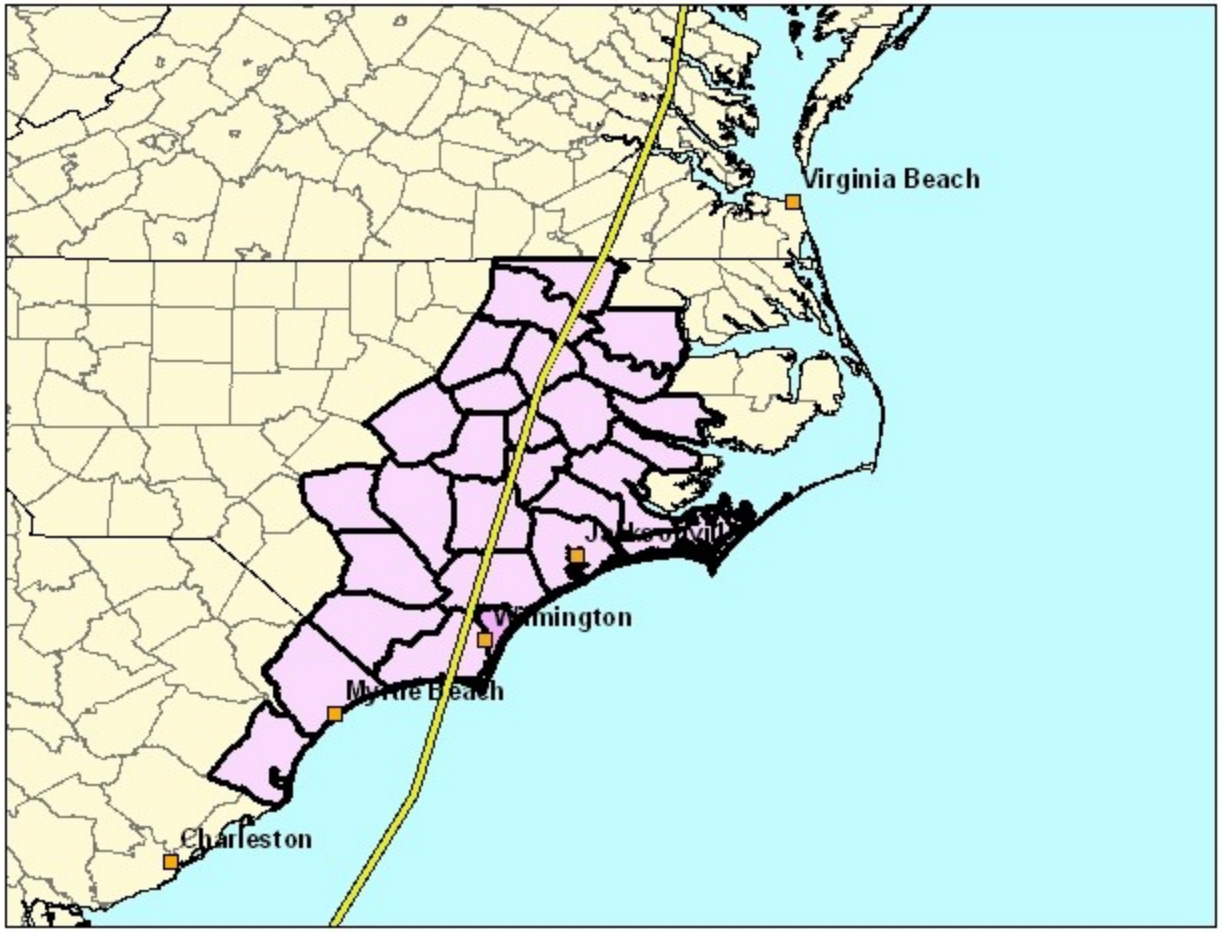
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Ernesto 2006 Temp Housing Model

## Landfall Plus About **12** Hours

**For Official Use Only!**




### *Post Landfall Temporary Housing Model Results*

North Carolina - 12,000
South Carolina - 1,200

*Model results per County on following page*

This model is based on a Category 3 storm making landfall near Holden Beach, NC.

Historic Track

**Temporary Housing**

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Holden Beach, NC. These projections are based on information from the NHC (1100 EDT 09/16/2007) forecast. Temporary housing is based on 1% in CAT 1, 3% in CAT 2 and 5% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Ernesto 2006 Housing Model | |
|---|---|
| **Generated By:** Siemsen, LRL 1130 EDT 09/16/2007 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 10 of 13 |

US Army Corps of Engineers

# Hurricane Ernesto 2006 Temp Housing Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | House Units per State | County | House Units per County |
|---|---|---|---|
| North Carolina | | Beaufort | < 100 |
| | | Bertie | < 100 |
| | | Bladen | 200 |
| | | Brunswick | 1,800 |
| | | Carteret | < 100 |
| | | Columbus | 300 |
| | | Craven | 200 |
| | | Cumberland | < 100 |
| | | Duplin | 800 |
| | | Edgecombe | 200 |
| | | Greene | 200 |
| | | Halifax | < 100 |
| | | Johnston | < 100 |
| | | Jones | < 100 |
| | | Lenoir | 700 |
| | | Martin | < 100 |
| | | Nash | < 100 |
| | | New Hanover | 3,900 |
| | | Northampton | < 100 |
| | | Onslow | 1,000 |
| | | Pender | 900 |
| | | Pitt | 600 |
| | | Sampson | 300 |
| | | Wayne | 600 |
| | | Wilson | 300 |
| North Carolina | 12,000 | | |
| | | | |
| South Carolina | | Georgetown | < 100 |
| | | Horry | 1,200 |
| South Carolina | 1,200 | | |
| | | | |

Temporary housing is based on 1% in CAT 1, 3% in CAT 2 and 5% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

**Hurricane Ernesto 2006 Housing Model**

**Generated By:**
Siemsen, LRL 1130 EDT 09/16/2007

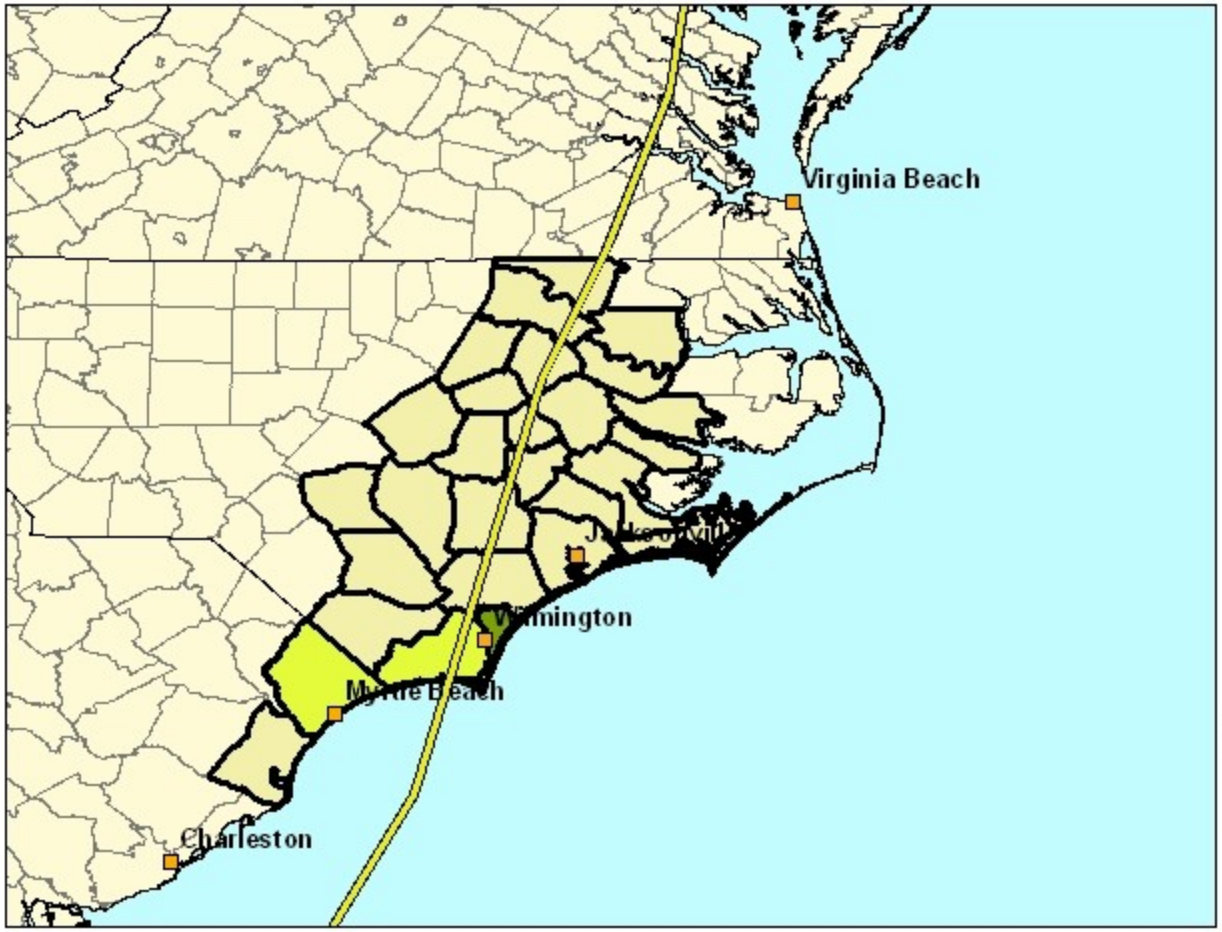
**Sources:**
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

# Hurricane Ernesto 2006 Temp Roofing Model

## Landfall Plus About 12 Hours

**For Official Use Only!**




### *Post Landfall Temporary Roofing Model Results*

North Carolina - 20,500
South Carolina - 2,200

*Model results per County on following page*

This model is based on a Category 3 storm making landfall near Holden Beach, NC.

Historic Track

**Temporary Roofing**

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Holden Beach, NC. These projections are based on information from the NHC (1100 EDT 09/16/2007) forecast. Temporary roofing is based on 2% in CAT 1, 5% in CAT 2 and 8% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

| Hurricane Ernesto 2006 Roofing Model | |
|---|---|
| **Generated By:** Siemsen, LRL 1130 EDT 09/16/2007 | |
| **Sources:** HURREVAC LRL-DEBRIS | Page 12 of 13 |

US Army Corps of Engineers

# Hurricane Ernesto 2006 Temp Roofing Model

## Landfall Plus About 12 Hours

**For Official Use Only!**

| State | House Units per State | County | House Units per County |
|---|---|---|---|
| North Carolina | | Beaufort | < 100 |
| | | Bertie | < 100 |
| | | Bladen | 300 |
| | | Brunswick | 2,900 |
| | | Carteret | < 100 |
| | | Columbus | 600 |
| | | Craven | 400 |
| | | Cumberland | < 100 |
| | | Duplin | 1,300 |
| | | Edgecombe | 400 |
| | | Greene | 400 |
| | | Halifax | < 100 |
| | | Johnston | < 100 |
| | | Jones | 200 |
| | | Lenoir | 1,100 |
| | | Martin | < 100 |
| | | Nash | < 100 |
| | | New Hanover | 6,300 |
| | | Northampton | < 100 |
| | | Onslow | 1,700 |
| | | Pender | 1,500 |
| | | Pitt | 1,200 |
| | | Sampson | 500 |
| | | Wayne | 1,200 |
| | | Wilson | 500 |
| North Carolina | 20,500 | | |
| | | | |
| South Carolina | | Georgetown | < 100 |
| | | Horry | 2,200 |
| South Carolina | 2,200 | | |
| | | | |

Temporary roofing is based on 2% in CAT 1, 5% in CAT 2 and 8% in CAT 3.

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or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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LRL-DEBRIS